

WHAT IS CLAIMED IS:

1. A method of providing a differential location service to a terminal, the method comprising:
 - 5 sending a request for a differential location service, the request including a geographic area defined independent of a specific format, wherein the request is sent at least partially over a wireless network;
 - receiving the request, and thereafter transforming the geographic area of the request to thereby define the geographic area in a predetermined manner; and
 - 10 determining whether to provide the requested differential location service based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.
2. A method according to Claim 1, wherein determining whether to provide the requested differential location service comprises:
 - 15 obtaining a current location of the terminal, and thereafter transforming the current location of the terminal to thereby define the current location in the predetermined manner;
 - comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and
 - 20 determining whether to provide the requested differential location service based upon the comparison.
3. A method according to Claim 1, wherein sending a request comprises sending a request further including a validity time to subscribe to a differential location service, and wherein determining whether to provide the requested differential location service comprises:
 - 25 determining if the subscription is valid based upon a current time and the validity time; and
 - providing the requested differential location service when the subscription is
 - 30 valid.

4. A method according to Claim 1, wherein sending a request comprises sending a request further including a trigger condition, and wherein determining whether to provide the requested differential location service comprises providing the requested differential location service if, based upon a comparison of a current location of the terminal and the geographic area, the current location of the terminal satisfies the trigger condition.

5. A method according to Claim 4, wherein sending a request comprises sending a request including a trigger condition specifying one of “outside” and “inside,” wherein determining whether to provide the requested differential location service comprises providing the requested differential location service if the current location of the terminal is outside the geographic area when the trigger condition specifies “outside,” and providing the requested differential location service if the current location of the terminal is inside the geographic area when the trigger condition specifies “inside.”

6. A method according to Claim 1, wherein sending a request comprises sending a request further including an action, and wherein determining whether to provide the requested differential location service comprises determining whether to execute the action based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

7. A method according to Claim 6, wherein sending a request comprises sending a request further including a validity time and a trigger condition, and wherein determining whether to provide the requested differential location service comprises:
determining if the subscription is valid based upon a current time and the validity time; and if the subscription is valid,
obtaining a current location of the terminal, and thereafter transforming the current location of the terminal to thereby define the current location in the predetermined manner;
comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and

executing the action if, based upon the comparison, the current location of the terminal satisfies the trigger condition.

8. A system for providing a differential location service to a terminal, the
5 system comprising:
a service provider capable of receiving a request for a differential location service from the terminal at least partially over a wireless network, the request including a geographic area defined independent of a specific format; and
a mapping processor capable of receiving the geographic area from the service
10 provider, wherein the mapping processor is capable of transforming the geographic area of the request to thereby define the geographic area in a predetermined manner, and thereafter sending the geographic area defined in the predetermined manner to the service provider,
wherein the service provider is also capable of determining whether to provide the
15 requested differential location service based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

9. A system according to Claim 8, wherein the service provider is capable of obtaining a current location of the terminal such that the mapping processor can
20 thereafter transform the current location of the terminal to thereby define the current location in the predetermined manner, wherein the service provider is then capable of comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner, and thereafter determining whether to provide the requested differential location service based upon the comparison.

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10. A system according to Claim 8, wherein the request further includes a validity time to subscribe to a differential location service, and wherein the service provider is capable of determining if the subscription is valid based upon a current time and the validity time, and capable of providing the requested differential location service
30 when the subscription is valid.

11. A system according to Claim 8, wherein the request further includes a trigger condition, and wherein the service provider is capable of providing the requested differential location service if, based upon a comparison of a current location of the terminal and the geographic area, the current location of the terminal satisfies the trigger condition.

12. A system according to Claim 11, wherein the trigger condition specifies one of “outside” and “inside,” wherein the service provider is capable of providing the requested differential location service if the current location of the terminal is outside the geographic area when the trigger condition specifies “outside,” and capable of providing the requested differential location service if the current location of the terminal is inside the geographic area when the trigger condition specifies “inside.”

13. A system according to Claim 8, wherein the request further includes an action, and wherein the service provider is capable of determining whether to provide the requested differential location service by determining whether to execute the action based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

14. A system according to Claim 13, wherein the request further includes a validity time and a trigger condition, wherein the service provider is capable of determining if the subscription is valid based upon a current time and the validity time, and if the subscription is valid, the service provider is capable of obtaining a current location of the terminal such that the mapping processor can thereafter transform the current location of the terminal to thereby define the current location in the predetermined manner, wherein the service provider is then capable of comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner, and thereafter executing the action if, based upon the comparison, the current location of the terminal satisfies the trigger condition to thereby provide the requested differential location service.

15. A system for providing a differential location service, the system comprising:

a terminal capable of sending a request for a differential location service, the request including a geographic area defined independent of a specific format, wherein the

5 terminal is capable of sending the request at least partially over a wireless network;

a service provider capable of receiving the request such that the geographic area can be transformed to thereby define the geographic area in a predetermined manner; and

a location provider capable of providing a current location of the terminal to the service provider such that the service provider is capable of determining whether to
10 provide the requested differential location service based upon a comparison of the current location of the terminal and the geographic area defined in the predetermined manner.

16. A system according to Claim 15, wherein the service provider is capable of receiving the current location of the terminal from the location provider such that the
15 current location can be transformed to thereby define the current location in the predetermined manner, wherein the service provider is then capable of comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner, and thereafter determining whether to provide the requested differential location service based upon the comparison.

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17. A system according to Claim 15, wherein the request further includes a validity time to subscribe to a differential location service, and wherein the service provider is capable of determining if the subscription is valid based upon a current time and the validity time, and capable of providing the requested differential location service
25 when the subscription is valid.

18. A system according to Claim 15, wherein the request further includes a trigger condition, and wherein the service provider is capable of providing the requested differential location service if, based upon a comparison of a current location of the
30 terminal and the geographic area, the current location of the terminal satisfies the trigger condition.

19. A system according to Claim 18, wherein the trigger condition specifies one of “outside” and “inside,” wherein the service provider is capable of providing the requested differential location service if the current location of the terminal is outside the geographic area when the trigger condition specifies “outside,” and capable of providing the requested differential location service if the current location of the terminal is inside the geographic area when the trigger condition specifies “inside.”

20. A system according to Claim 15, wherein the request further includes an action, and wherein the service provider is capable of determining whether to provide the requested differential location service by determining whether to execute the action based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

21. A system according to Claim 20, wherein the request further includes a validity time and a trigger condition, wherein the service provider is capable of determining if the subscription is valid based upon a current time and the validity time, and if the subscription is valid, the service provider is capable of receiving the current location of the terminal from the location provider such that the current location can be transformed to thereby define the current location in the predetermined manner, wherein the service provider is then capable of comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner, and thereafter executing the action if, based upon the comparison, the current location of the terminal satisfies the trigger condition to thereby provide the requested differential location service.

22. A computer program product for providing a differential location service to a terminal, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

a first executable portion for sending a request for a differential location service, the request including a geographic area defined independent of a specific format, wherein the request is sent at least partially over a wireless network;

a second executable portion for receiving the request;

5 a third executable portion for transforming the geographic area of the request to thereby define the geographic area in a predetermined manner; and

a fourth executable portion for determining whether to provide the requested differential location service based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

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23. A computer program product according to Claim 22, wherein the fourth executable portion is adapted to determine whether to provide the requested differential location service by:

obtaining a current location of the terminal, and thereafter transforming the
15 current location of the terminal to thereby define the current location in the predetermined manner;

comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and

determining whether to provide the requested differential location service based
20 upon the comparison.

24. A computer program product according to Claim 22, wherein the first executable portion is adapted to send a request further including a validity time to subscribe to a differential location service, and wherein the fourth executable portion is
25 adapted to determine whether to provide the requested differential location service by determining if the subscription is valid based upon a current time and the validity time, and thereafter providing the requested differential location service when the subscription is valid.

30 25. A computer program product according to Claim 22, wherein the first executable portion is adapted to send a request further including a trigger condition, and

wherein the fourth executable portion is adapted to determine whether to provide the requested differential location service by providing the requested differential location service if, based upon a comparison of a current location of the terminal and the geographic area, the current location of the terminal satisfies the trigger condition.

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26. A computer program product according to Claim 25, wherein the first executable portion is adapted to send a request including a trigger condition specifying one of "outside" and "inside," wherein the fourth executable portion is adapted to provide the requested differential location service if the current location of the terminal is outside the geographic area when the trigger condition specifies "outside," and provide the requested differential location service if the current location of the terminal is inside the geographic area when the trigger condition specifies "inside."

27. A computer program product according to Claim 22, wherein the first executable portion is adapted to send a request further including an action, and wherein the fourth executable portion is adapted to determine whether to execute the action based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

28. A computer program product according to Claim 27, wherein the first executable portion is adapted to send a request further including a validity time and a trigger condition, and wherein the fourth executable portion is adapted to determine whether to provide the requested differential location service by:

determining if the subscription is valid based upon a current time and the validity time; and if the subscription is valid,

obtaining a current location of the terminal, and thereafter transforming the current location of the terminal to thereby define the current location in the predetermined manner;

comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and

executing the action if, based upon the comparison, the current location of the terminal satisfies the trigger condition.

29. A computer program product for providing a differential location service
5 to a terminal, the computer program product comprising a computer-readable storage
medium having computer-readable program code portions stored therein, the computer-
readable program code portions comprising:
a first executable portion for receiving a request for a differential location service,
the request including a geographic area defined independent of a specific format, wherein
10 the request is received at least partially over a wireless network;
a second executable portion for initiating transformation the geographic area of
the request to thereby define the geographic area in a predetermined manner; and
a third executable portion for determining whether to provide the requested
differential location service based upon a comparison of a current location of the terminal
15 and the geographic area defined in the predetermined manner.

30. A computer program product according to Claim 29, wherein the third
executable portion is adapted to determine whether to provide the requested differential
location service by:
20 obtaining a current location of the terminal, and thereafter initiating
transformation the current location of the terminal to thereby define the current location
in the predetermined manner;
comparing the current location of the terminal defined in the predetermined
manner with the geographic area defined in the predetermined manner; and
25 determining whether to provide the requested differential location service based
upon the comparison.

31. A computer program product according to Claim 29, wherein the first
executable portion is adapted to receive a request further including a validity time to
30 subscribe to a differential location service, and wherein the third executable portion is
adapted to determine whether to provide the requested differential location service by

determining if the subscription is valid based upon a current time and the validity time, and thereafter providing the requested differential location service when the subscription is valid.

5 32. A computer program product according to Claim 29, wherein the first executable portion is adapted to receive a request further including a trigger condition, and wherein the third executable portion is adapted to determine whether to provide the requested differential location service by providing the requested differential location service if, based upon a comparison of a current location of the terminal and the
10 geographic area, the current location of the terminal satisfies the trigger condition.

 33. A computer program product according to Claim 32, wherein the first executable portion is adapted to receive a request including a trigger condition specifying one of “outside” and “inside,” wherein the third executable portion is adapted to provide
15 the requested differential location service if the current location of the terminal is outside the geographic area when the trigger condition specifies “outside,” and provide the requested differential location service if the current location of the terminal is inside the geographic area when the trigger condition specifies “inside.”

20 34. A computer program product according to Claim 29, wherein the first executable portion is adapted to receive a request further including an action, and wherein the third executable portion is adapted to determine whether to execute the action based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

25 35. A computer program product according to Claim 34, wherein the first executable portion is adapted to receive a request further including a validity time and a trigger condition, and wherein the third executable portion is adapted to determine whether to provide the requested differential location service by:
30 determining if the subscription is valid based upon a current time and the validity time; and if the subscription is valid,

obtaining a current location of the terminal, and thereafter initiating transformation of the current location of the terminal to thereby define the current location in the predetermined manner;

5 comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and
 executing the action if, based upon the comparison, the current location of the terminal satisfies the trigger condition.

36. A computer program product for providing a differential location service
10 to a terminal, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

 a first executable portion for sending a request for a differential location service, the request including a geographic area defined independent of a specific format, wherein
15 the request is sent at least partially over a wireless network such that, upon receipt of the request, the geographic area of the request can be transformed to thereby define the geographic area in a predetermined manner, and wherein the request is sent such that it can be determined whether to provide the requested differential location service based upon a comparison of a current location of the terminal and the geographic area defined
20 in the predetermined manner.

37. A computer program product according to Claim 36, wherein the first executable portion is adapted to send the request such that it can be determined whether to provide the requested differential location service by:

25 obtaining a current location of the terminal, and thereafter transforming the current location of the terminal to thereby define the current location in the predetermined manner;

 comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and

30 determining whether to provide the requested differential location service based upon the comparison.

38. A computer program product according to Claim 36, wherein the first executable portion is adapted to send a request further including a validity time to subscribe to a differential location service such that it can be determined whether to provide the requested differential location service by determining if the subscription is valid based upon a current time and the validity time to thereby provide the requested differential location service when the subscription is valid.

39. A computer program product according to Claim 36, wherein the first executable portion is adapted to send a request further including a trigger condition such that the requested differential location service can be provided if, based upon a comparison of a current location of the terminal and the geographic area, the current location of the terminal satisfies the trigger condition.

40. A computer program product according to Claim 39, wherein the first executable portion is adapted to send a request including a trigger condition specifying one of "outside" and "inside" such that the requested differential location service can be provided if the current location of the terminal is outside the geographic area when the trigger condition specifies "outside," and if the current location of the terminal is inside the geographic area when the trigger condition specifies "inside."

41. A computer program product according to Claim 36, wherein the first executable portion is adapted to send a request further including an action such that it can be determined whether to execute the action based upon a comparison of a current location of the terminal and the geographic area defined in the predetermined manner.

42. A computer program product according to Claim 41, wherein the first executable portion is adapted to send a request further including a validity time and a trigger condition such that it can be determined whether to provide the requested differential location service by:

determining if the subscription is valid based upon a current time and the validity time; and if the subscription is valid,

obtaining a current location of the terminal, and thereafter transforming the current location of the terminal to thereby define the current location in the

5 predetermined manner;

comparing the current location of the terminal defined in the predetermined manner with the geographic area defined in the predetermined manner; and

executing the action if, based upon the comparison, the current location of the terminal satisfies the trigger condition.

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